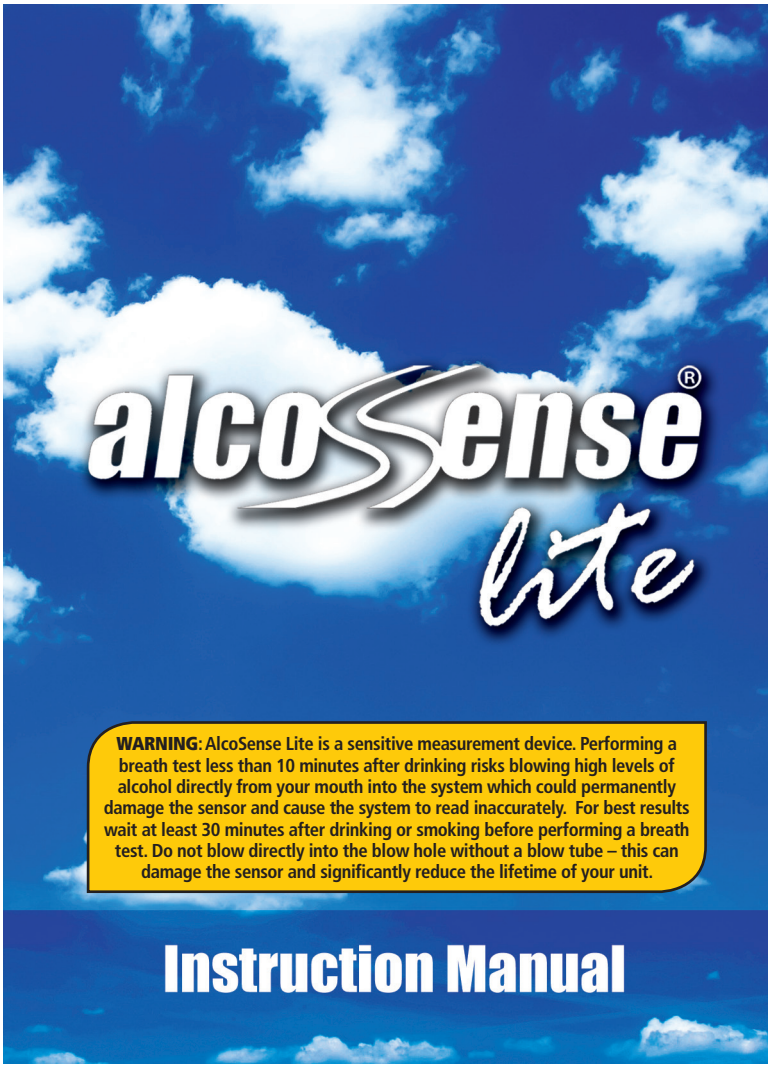

alcoSense®
lite
WARNING: AlcoSense Lite is a sensitive measurement device. Performing a breath test less than 10 minutes after drinking risks blowing high levels of alcohol directly from your mouth into the system which could permanently damage the sensor and cause the system to read inaccurately. For best results wait at least 30 minutes after drinking or smoking before performing a breath test. Do not blow directly into the blow hole without a blow tube – this can damage the sensor and significantly reduce the lifetime of your unit.
Instruction Manual

AlcoSense Lite Instruction Manual

Thank you for purchasing your new AlcoSense Lite Breathalyser.

As you know, you never can tell how long it takes for alcohol to clear from your body after having a drink. It depends on many variables including body mass, time of day, food intake and even if you have a cold.

Road safety is our primary concern, specifically making it easy for you to know when you are below the legal driving limit again the morning after a few drinks. The AlcoSense Lite breathalyser is designed to quickly and accurately indicate your level of intoxication, alerting you as to whether you are over or under the UK drink drive limit. With its unique ASC technology it can be used again and again while maintaining accuracy for longer.

Like me, many responsible drivers use the AlcoSense Lite breathalyser to help make sure they're OK to drive the morning after. Thank you again for purchasing this product and I'm sure you will be delighted with it.

Yours sincerely,

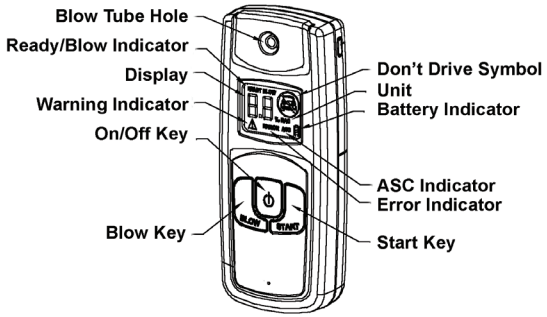
Hunter Abbott, Managing Director

Important - Please read
It is safest to drive when you have no alcohol left in your blood stream. As a result we only recommend driving when the AlcoSense Lite breathalyser reads 'LO'. If you have the slightest doubt in your mind about your fitness to drive DO NOT. Before using the AlcoSense Lite breathalyser you agree you have read the operating instructions & are aware of the legal alcohol limit in your jurisdiction. The manufacturer distributors and sellers of this product exclude all liability for improper use or loss or damage caused by actions taken by you after use of this product.

AlcoSense Lite User Manual Version 1.10

Contents

Introduction	2	Understanding the results	9
Getting Started	5	How to Establish if an ASC is needed	12
Turning On/Off	6	Accessories	13
Automatic Sensor Clean (ASC)	6	Servicing	14
Maintaining your AlcoSense Lite	7	Legal	15
Performing a breath test	8		



How Breathalysers Work

Breathalysers work by measuring the concentration of alcohol vapour in your breath. Contrary to popular belief the alcohol is not coming from residue in your mouth but is actually evaporating from the blood that passes through your lungs when you breathe. The amount of alcohol evaporating from your lungs is directly proportional to the amount of alcohol in your blood stream making it possible to accurately calculate the percentage Blood Alcohol Concentration (‰ BAC).

How Alcohol Is Processed by the Body

When you drink, alcohol is absorbed into the blood stream through your mouth and throat but mostly through the stomach and small intestine. The more you drink the more alcohol is absorbed by the body and the higher your BAC reading will become. Approximately 90 minutes after the alcohol is consumed it is distributed equally around the body through the blood stream. This is known as the point of Equilibrium. ►

As blood flows round the body around 90‰ of the alcohol it contains is broken down in to water and carbon dioxide by the liver in a process called Oxidation. The remaining 10‰ of the alcohol is passed from the body through the lungs and kidneys. A healthy liver typically breaks down alcohol at a rate of one unit of alcohol per hour but the more alcohol that is consumed the longer it can take for the liver to process each unit.

When you stop drinking your level of intoxication may stay constant or if you have been drinking heavily it could even increase for around 2 hours afterwards. This is because of the time it takes for alcohol to reach the bloodstream from the time you actually had the drink. If you have eaten food this can also increase the time, as the release of alcohol into the bloodstream can be slowed by it being absorbed by food in the stomach. This is the reason why we do not recommend using the breathalyser just after finishing drinking because there are too many factors that can influence the reading. The ideal time is the morning after.

Things That Can Affect the Reading of Your Breathalyser
There are some factors that can affect the reading of breathalysers whether it be the AlcoSense Lite breathalyser or a police system. As long as you are aware of these factors you will be able to use your AlcoSense Lite to give high precision readings.

The Do's and Don'ts
Do:
- Use the breathalyser the morning after a few drinks.
- Read the instructions carefully
- Perform an ASC (see page 8) regularly
- Phone us if you have any difficulties
- Have a quick drink of water before using the breathalyser to remove any contaminants in the mouth

Don't
- Use the breathalyser for at least 30 minutes after drinking alcohol (we recommend using it the morning after, please see section "How Alcohol is Processed by the Body" on page 3)
- Use the breathalyser for at least 30 minutes after using mouthwash, breath spray, cough medicine or anything else that may contain alcohol. ►

- Use the breathalyser for at least 25 minutes after having a cigarette or eating certain over-ripe fruit.
- Perform a test in dirty air, i.e. a smokey room.
- Use the breathalyser if you are breathing quickly (for example, after running up the stairs) or have been holding your breath. This can falsely lower or raise the reading respectively. Wait until you are breathing normally again.

Getting Started
This section will take you step by step through the basics of using your new AlcoSense Lite Breathalyser, namely:

1. Unpacking the box
2. Installing the batteries
3. **Preparing it for use for the first time – performing an Auto Sensor Clean (ASC)**
4. How to perform a breath test and understanding the results
5. Things that can affect the readings

Unpacking the Box
In the box you will have the following components:

1) 1 x AlcoSense Lite Breathalyser
2) This instruction manual
3) 5 x Blow Straws
4) 1 x Cleaning cap (small plastic cap inside battery compartment)
5) 1 x Pipette

Installing the Batteries
Turn the AlcoSense Lite over so that the back is facing you. Press the arrow down and slide the battery cover away from the unit. Insert three 1.5v AAA batteries into the slots provided making sure that the batteries are inserted the right way round as indicated in the battery compartment. Then slide the battery compartment cover back on again. The AlcoSense Lite will then start it's initial ASC (Auto Sensor Clean) program which prepares the unit for it's first use after storage. This process takes approximately 10 minutes to complete.

Turning the AlcoSense Lite On and Off

Turning On

AlcoSense Lite can be turned on by pressing and holding the On/Off Key

Turning Off

The unit will automatically turn itself off after a while to conserve its batteries. If you wish to turn it off manually you can do so by pressing and holding the On/Off button down.

Automatic Sensor Clean (ASC) Function

The first time you use your AlcoSense Lite breathalyser it will automatically perform an ASC. The ASC Function cleans the sensor inside the system and removes any contaminants from it (for example, oxidisation if it has not been used for a period of time or residue left from tannin in red wine etc) to ensure high precision readings. We recommend you perform and ASC if you have not used AlcoSense Lite for a week or more. To perform an ASC please do the following:

Please note: When performing an ASC you will need to do so an environment with clean fresh air.

a) Either remove the batteries from the back of the unit, wait 5 seconds and re-insert them. Alternatively turn the unit off, then press and hold both the BLOW key and ON/OFF key together for 2 seconds.

b) Two beeps will be heard to indicate the start of the ASC function and ASC will flash on the screen.

ASC will then flash on the screen for the duration the ASC function runs for. After 10 minutes the AlcoSense Lite will beep meaning that it is finished.

ASC is now complete and you are now ready to use your AlcoSense Lite Breathalyser!

Please note: You will need to perform an ASC at various intervals to ensure high precision readings. To establish if your unit requires an ASC in the future please read "How to Establish if an ASC is Needed in the Future" on page 12.

Maintaining your AlcoSense Lite Breathalyser

Keep it Clean

To keep your AlcoSense Lite in tip top condition we recommend cleaning it regularly using a soft damp cloth or the AlcoSense Lite Cleaning Kit which is available separately. We also recommend that you regularly perform an ASC (Auto Sensor Clean as explained on page 6).

Clean the Sensor

We recommend you should perform an ASC regularly to remove any contaminants from the sensor. You can find instructions for doing this on page 6.

Be Careful

Take care not to drop the AlcoSense Lite breathalyser as sudden knocks can affect the unit's accuracy. If you have dropped your AlcoSense Lite and feel that it is not reading correctly please call us to arrange to have the unit serviced. When the product is unused, please store it in a cool and dry environment.

Technical Support

If you have any queries which are not covered in this manual or need assistance using your unit please call our technical support number Monday to Friday 9am to 5.30pm. When calling please make sure you have your breathalyser to hand.

Re-Calibration

Like any sensitive instrument, your AlcoSense breathalyser may require recalibration after a period of use. We recommend your AlcoSense breathalyser should be re-calibrated once a year or more frequently if you use it heavily. Please contact us to arrange calibration.

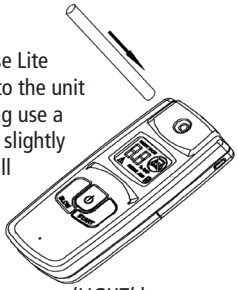
How to Perform a Breath Test
Performing a breath test is easy and can be performed quickly.

WARNING: AlcoSense Lite is a sensitive measurement device. Performing a breath test less than 10 minutes after drinking risks blowing high levels of alcohol directly from your mouth into the system which could permanently damage the sensor and cause the system to read inaccurately. For best results wait at least 30 minutes after drinking or smoking before performing a breath test. Do not blow directly into the blow hole without a blow tube – this can damage the sensor and significantly reduce the lifetime of your unit.

1. Put blow tube on the system as show in the image below.

2. Press the ON/OFF button once and the screen will count down to zero while it performs a self test procedure.

3. When it has counted down to zero it will beep twice and BLOW will be displayed on the screen.



4. Blow through the blow tube in to the AlcoSense Lite while pressing the blow button. You must blow into the unit with a constant breath (IMPORTANT: when blowing use a pressure similar to when you breath out normally) slightly harder than a sigh until the unit beeps again. It will then display your results. If it says ERROR please see "Understanding the Results" for instructions.

NOTE:

If the backlight turns off (for power saving), you can press 'LIGHT' key once to turn it on again.

To ensure the most accurate readings please make sure there is no alcohol residue left inside the sensor chamber before each test. To check if there is any left follow the steps for a blow test but do not blow into the system when it asks, just hold the blow button until it beeps. If there is no residual alcohol left it will display LO. If it displays anything else, leave the unit for 10 minutes to allow the alcohol to evaporate. After 5 consecutive tests we recommend a 5 minute break before continuing.

Understanding the Results

First, check the drink drive limit in the table below and with your local road authority. The AlcoSense will display the result of your breath test on screen in ‰BAC. The alert level your unit is set to is displayed on a sticker on top of the unit.

Although the legal limit in your country may be higher it is safest driving when you have no alcohol left in your system. As a result only drive when the breathalyser reads LO, you feel100% and have no reason to believe you may still have alcohol in your system.

Country	‰BAC Limit*	Country	‰BAC Limit*
Australia	0.5 ‰BAC	Luxembourg	0.8 ‰BAC
Australia (prof. drivers)	0.2 ‰BAC	Malta	0.8 ‰BAC
Austria	0.5 ‰BAC	Northern Ireland	0.8 ‰BAC
Belgium	0.5 ‰BAC	Norway	0.2 ‰BAC
Canada	0.5 ‰BAC	Poland	0.2 ‰BAC
Cyprus	0.5 ‰BAC	Russia	Zero
Czech Republic	0.5 ‰BAC	Slovakia	Zero
Denmark	0.5 ‰BAC	Spain	0.5 ‰BAC
Finland	0.5 ‰BAC	Sweden	0.2 ‰BAC
France	0.5 ‰BAC	Switzerland	0.5 ‰BAC
Holland	0.5 ‰BAC	Turkey	0.5 ‰BAC
Hungary	Zero	UAE	Zero
Ireland (Republic of)	0.5 ‰BAC	UK	0.8 ‰BAC
Italy	0.5 ‰BAC	USA	0.8 ‰BAC

*Please Note: The legal limits above are correct as of June 2011. Should you use the breathalyser in different countries you must be aware of the drink drive limit in the jurisdiction you are using the AlcoSense in. Also, should the drink drive limit in your country change you must be aware that your AlcoSense breathalyser will continue to alert you not to drive at the original level with an accuracy of +/- 0.2 ‰ BAC taking into account environmental variables.

On top of the unit there is a small sticker showing the alert level. Check this then refer to the correct column and explanation for your device below. Make sure you know the correct drink drive limit in your area.

0.5‰BAC Alert Level Model		0.8‰BAC Alert Level M
Description	Example of Screen	Description E
LO **Less than 0.2‰BAC**		**LO** **Less than 0.2‰BAC**
Between 0.2‰BAC and 0.3‰BAC		**Between 0.2‰BAC and 0.5‰BAC**
Between 0.3‰BAC and 0.4‰BAC (Hazard symbol will be displayed on screen)		**Between 0.6‰BAC and 0.7‰BAC (Hazard symbol will be displayed on screen)**
Between 0.5‰BAC and 1.5‰BAC (Don't drive symbol is shown)		**Between 0.8‰BAC and 1.5‰BAC (Don't drive symbol is shown)**
Above 1.5‰BAC (Don't drive symbol is shown)		**Above 1.5‰BAC (Don't drive symbol is shown)**
Error in Reading		**Error in Reading**

el Model

Example of Screen	Explanation
	Zero or Trace Alcohol There is either no alcohol in the sample or such a small amount it is negligible. The reading is well below the legal drink drive limit.
	Low Levels The sample has alcohol in it but it is below the legal drink drive limit and therefore recommended you don't drive.
	Close to or Possibly over the Limit The sample was very close to the legal drink drive limit, taking into account environmental variables you could be on or just over the limit. Do not drive.
	Over the Limit The sample is at or above the legal drink drive limit. Do not drive.
	The sample's alcohol level is above 1.5‰BAC and is outside the reading range of this device. Do not drive.
	There has been an error while performing the breath test. This is normally caused by either blowing too hard or too softly into the AlcoSense. See page 8, bullet point 4 or call us.

How to Establish if an Automatic Sensor Clean (ASC) is Needed in the Future

To keep your AlcoSense Lite breathalyser reading at its most accurate we recommend performing an ASC if it is not used for more than a week or when required as explained below.

To perform the test below you must have an alcoholic liquid of 3-5‰ volume. In the UK pre-made drinks of this volume are difficult to find so we suggest the following which can be easily prepared using normal white wine. All you need to do is mix a small amount of white wine and water in a ratio of 1 part wine to 2 parts of water. This reduces the wine's alcohol ‰ volume from approx 12-14‰ to 3-5‰ and provides a very pure liquid which is ideal.

1) In the box there is a small plastic cap which will fit over the blow tube hole on the front of the unit. Put a small drop of the liquid you have mixed in to the cap and place it over the blow tube hole on the AlcoSense Lite as shown in figure 1 on page 11.

2) Start the procedure for a blow test but when the AlcoSense Lite displays Blow on the screen, hold down the Blow button for 5 seconds, until a beep is heard, allowing the vapour from the cap to enter the sensor chamber.

a. If the result from the test is LO an ASC should be performed, please see the section referring to the ASC function in this manual. If after performing the ASC the result is still LO repeat the ASC again. If it is still LO after the second ASC please call us on 0800 195 0088.

b. If the result is HI or another reading other than LO the unit does not require an ASC

3) Before continuing remove the cap and you should clear the sensor chamber of any residual alcohol vapour left by it. To do this use the pipette included in the box to blow fresh air in to the system as shown in figure 2 on page 13. Alternatively you can leave the unit for 20-30 minutes for the alcohol to evaporate.

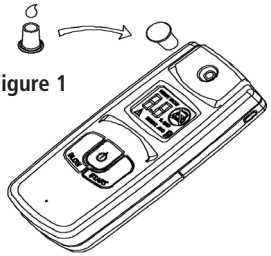


Figure 1

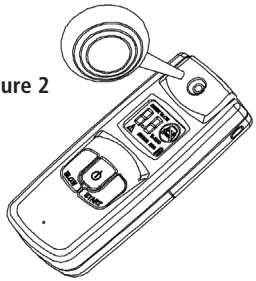


Figure 2

Accessories

The following accessories are available for your AlcoSense Lite unit, which are available either from your local dealer or directly from www.AlcoSense.co.uk.

Accessory	Description	Price*
Protective Carry Case	Keep your AlcoSense Lite breathalyser safe and sound in this beautiful carry case	£9.99
Cleaning Pack	Special cleaning fluid complete with micro fibre cloth and storage pouch	£6.99
Pack of 20 Spare Straws	Pack of 20 straws for breath tests	£4.99

*Subject to change

Servicing

We will happily service your breathalyser to keep it in top condition so that it is reading to the highest levels of accuracy and reliability. Servicing normally takes around 5 working days to complete as after each service your AlcoSense Lite breathalyser will be quality tested before leaving us. We have three levels of service:

1) Re-Calibration
We will re-calibrate your AlcoSense Lite breathalyser to ensure it continues to read at it most accurate. This service is charged at £17.99 and includes return postage costs to you. Please call 0800 195 0088 to arrange this. We recommend this is done once every 12 months.

2) Alert Level Change
Should the UK law change we can recalibrate your AlcoSense Lite unit to alert at the new drink drive limit. This service typically takes 3-5 working days to complete and is priced at £19.99 including return postage back to you.

3) Full Service
This service completely re-works your breathalyser, including cleaning sterilisation, re-calibration and replacing any parts that may be required. If the drink drive limit has changed we will also update the alert level for you. This service typically takes 5 working days to complete and is priced at £24.99 including return postage back to you.

Re-Calibration
Like any sensitive instrument, your AlcoSense breathalyser may require recalibration after a period of use. We recommend your AlcoSense breathalyser should be re-calibrated once a year or more frequently if you use it heavily. Please contact us to arrange this.

Note on Environmental Protection
After implementation of the European Directive 2002/96/EU in the national legal system, the following applies: Electrical and electronic devices may not be disposed of with domestic waste. Consumers are obliged by law to return electrical and electronic devices at the end of their service lives to the public collecting points set up for the purpose or point of sale. Details to this are defined by the national law of the respective country. This symbol of the product, packaging or instruction manual indicates that this product is subject to these regulations. By Recycling, re-using the materials or other forms of utilising old devices, you are making an important contribution to protecting our environment.

Although every effort has been made to ensure that the contents of this manual are accurate and reliable Now Group UK Ltd accept no liability for errors or omissions and we reserve the right to change information without notice.

RoHS Compliant CE

AlcoSense Lite limited warranty

WARRANTOR
This Limited Warranty is granted by and this Limitation of Liability is stipulated for the benefit of AlcoSense Lite, a trade mark of Now Group UK Ltd, Minster Court, 22-30 York Road, Maidenhead, Berkshire SL6 1SF Unite Kingdom.

WHAT THIS WARRANTY COVERS
1) Now Group UK Ltd. ("AlcoSense Lite") warrants to you that the Hardware will be free from defects in workmanship and materials under normal use ("Defects") for a period of one (1) year from the date that the Hardware was first purchased by you ("Warranty Period"). During the Warranty Period the Hardware will be repaired or replaced at AlcoSense Lite's choice ("Limited Warranty") without charge to you for either parts or labour. This Limited Warranty covers the replacement of the Hardware only. If the Hardware is repaired after the Warranty Period has expired (at your cost), the Warranty Period for the repair will expire six (6) months after the date of repair.

WHAT THIS WARRANTY DOES NOT COVER
2) The Limited Warranty does not apply to normal wear and tear, does not apply when the Hardware is opened or repaired by someone not authorised by AlcoSense Lite and does not cover repair or replacement of any Hardware or part thereof damaged by: misuse, moisture, liquids, proximity or exposure to heat and accident, abuse, non-compliance with the instructions supplied with the Hardware, neglect or misapplication. The Limited Warranty does not cover physical damage to the surface of the Hardware or calibration of the Hardware.

HOW TO MAKE A WARRANTY CLAIM
3) In order to make a claim of a Defect, you must contact AlcoSense Lite by email or telephone during the Warranty Period via www.AlcoSense.com to explain the Defect and to obtain an RMA number (Return Materials Authorisation) if necessary. You must return the Hardware during the Warranty Period, along with an explanation of the Defect, to the address provided to you by AlcoSense Lite. If a defect arises and a valid claim under this Limited Warranty is received by AlcoSense Lite after the first one hundred and eighty (180) days of the Warranty Period, AlcoSense Lite is entitled to charge you for any reasonable shipping and handling costs made in connection with the repair or replacement of the Hardware. You must comply with any other return procedures stipulated by AlcoSense Lite, if any.

YOUR LEGAL RIGHTS
4) Some countries may not allow the exclusion or limitation of damages. If any part of this Limited Warranty is held to be invalid or unenforceable, the remainder of the Limited Warranty shall nonetheless remain in full force and effect.
5) This Limited Warranty is the only express warranty made to you and is provided in lieu of any other express warranties or similar obligations (if any) created by any advertising, documentation, packaging, or other communications.
6) Except for the Limited Warranty and to the maximum extent permitted by applicable law, AlcoSense Lite and its suppliers provide the Hardware "AS IS AND WITH ALL FAULTS", and hereby disclaim all other warranties and conditions, whether express, implied or statutory, including, but not limited to, any (if any) implied warranties, duties or conditions of satisfactory quality, of fitness for a particular purpose, of reliability or availability, of accuracy or completeness of responses, of results, of workmanlike effort, of lack of viruses, and of reasonable care and skill, all with regard to the Hardware, and the provision of or failure to provide support or other services, information, software, and related content through the Hardware or otherwise arising out of the use of the Hardware. Also, there is no warranty or condition of quiet enjoyment, quiet possession, or non-infringement with regard to the Hardware. This exclusion does not apply to (i) any implied condition as to title and (ii) any implied warranty as to conformity with description.
7) This Limited Warranty does not affect any legal rights under applicable national legislation governing the sale of consumer goods.
8) This Limited Warranty cannot be transferred to any other person.

LIMITATION OF LIABILITY
1) Neither Now Group UK Ltd nor its suppliers shall be liable to you or to any third party for any damages either direct, indirect, incidental, consequential or otherwise (including in each case, but not limited to, damages for the inability to use the equipment, loss of business, loss of profits, business interruption or the like) arising out of the use of or inability to use the Hardware even if Now Group UK Ltd has been advised of the possibility of such damages.
2) Notwithstanding any damages that you might incur for any reason whatsoever (including, without limitation, all damages referenced herein and all direct or general damages in contract or anything else), the entire liability of Now Group UK Ltd and any of its suppliers shall be limited to the amount actually paid by you for the Hardware.
3) Now Group UK Ltd shall not be liable for (i) any fraud on the part of its employees and/or agents; or (ii) any fraudulent misrepresentation on the part of its employees and/or agents.
4) Notwithstanding the above, neither party's liability for death or personal injury resulting from its own negligence shall be limited.
5) If any of these terms shall become or be declared illegal, invalid or unenforceable for any reason whatsoever such term shall be divisible from these terms and shall be deemed to be deleted from them.

Win dinner with Stirling Moss*

Register on-line at: www.AlcoSense.com/register

*Terms and Conditions apply, see on-line for details

Now Group UK Limited

AlcoSense™ is a trademark of Now Group UK Ltd

0800 195 0088 **info@AlcoSense.com** **www.AlcoSense.com**